



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/578,904	05/26/2000	Robert R. Bushey	P19004	8391
7055	7590	09/28/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			BAUTISTA, XIOMARA L	
		ART UNIT	PAPER NUMBER	
		2179	13	
DATE MAILED: 09/28/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/578,904	BUSHEY ET AL.
	Examiner X L Bautista	Art Unit 2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 09 August 2004.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-18 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3, and 11 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 8/9/04 have been fully considered but they are not persuasive.
 - A. Applicant argues, "the customized profiles of GERACE do not disclose 'modeling the described behavioral characteristics and user preferences,' at least because any behavioral characteristics and/or user preferences in GERACE are not disclosed to be 'categorized' or 'described,' as recited in claim 1." (page 9, lines 15-20; page 10, lines 1-4).

In response, Gerace discloses content of categories of interests (preferences) and psychographic profile based on user viewing (behavior); analysis of user responses for a set of users (group) that is used for refining target user profile; viewing habits and user responses of sets of users are used for customizing ads for an audience (abstract; col. 2, lines 1-15; col. 3, lines 4-10; col. 4, lines 29-55, 60-64).

- B. Applicant argues, "GERACE does not appear to disclose any testing whatsoever, let alone 'interactive interface testing' that relates to 'qualitative and quantitative models,'... GERACE actually discloses automated and real time adjustment of 'intended audience profile of advertisements,'... continually adjusting a program based on updated data is not the same, or a mere obvious variation, of testing a program...there is not

disclosure that the adjustments relate to the application of models...GERACE does not disclose or suggest applying models to...‘interactive interface testing,’ as recited in claim 1.” (page 9, lines 15-page 10, line 4).

In response, Gerace discloses that behavioral characteristics and user preferences are used to determining and generating a customized interface. Gerace teaches that display of advertisements are customized as to content and presentation (colors used, orientation on the screen, audio/video components, etc. = qualitative models); and for each advertisement, advertisement module 75 and/or user profiling member 73, records the number of times and/or number of users to whom the advertisement has been displayed, the number of times/users who have requested more information regarding the advertisement, and the number of purchases obtained through program 31’s display of the advertisement (quantitative model), (col. 5, lines 15-34).

C. Applicant argues, “the continued adjustment of the advertising module in GERACE is not ‘validating’ the user behaviors and user preferences, at least because, in adjusting the model, GERACE does not disclose that a particular user behavior may be found, e.g. invalid.” (page 10, lines 13-16).

In response, GERACE discloses analysis of data to determine whether the customized data to be presented to the user conforms to (validity check) predetermined parameters (user preferences, behavior, profile), (col. 4, lines 30-46; col. 7, lines 23-50).

D. Applicant argues, “there is no disclosure that GERACE tracks design

requirements in any way, let alone 'for the validated...behaviors and...preferences.'" (page 10, line 18-page 11, line 1).

In response, Gerace discloses that the presentation is customized to the end user's preferences due to information tracked and recorded (created user profile) by program 31 (col. 4, lines 30-36). Program 31 creates a user profile from the viewing habits of the user, and generates a custom Home Page including a user's preferred content and presentation (col. 4, lines 11-28; col. 35, lines 7-26); that is, the user preferences, behavior, and profile determine the interface design or customization

E. Applicant argues, "GERACE does not disclose or suggest any manner of testing a design, let alone iteratively testing a design... GERACE merely discloses adjusting an advertising module to ensure advertisements are targeted to a proper audience." (page 11, lines 4-7).

In response, see response to argument D. Gerace teaches that program 31 automates weighting of criteria and in real time adjusts the intended audience profile of advertisements; it tracks demographic and/or psychographic criteria of users who view and/or select advertisements; it performs analysis of tracked criteria, which results in testing to determine the significance of criteria/variables; it continually performs testing so as to maximize/optimize success of displayed advertisements (col. 15, lines 25-44; col. 36, lines 23-42; col. 37, lines 22-29).

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 12/22/03 was filed after the mailing date of the First Office Action on 8/27/03. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. A PTO-1449 Form was not attached to the communication.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 1-7, 9-15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerace (US 5,848,396) and Hoffberg et al (US 5,875,108).**

Claim 1:

Gerace discloses a method for designing a customized user interface that categorizes a user population into groups using qualitative and quantitative models; and applies the models into interface design (abstract; col. 2, lines 3-23, col. 4, lines 1-47; col. 5, lines 27-31), interactive interface testing (col. 15, lines 25-44), and interface system deployment (col. 34, lines 29-40; col. 35, lines 7-13; col. 36, lines 22-26).

Gerace does not teach categorizing a user population into at least two groups, each

group having a plurality of users. However, Hoffberg discloses an adaptive interface for a programmable system, for predicting a desired user function, based on user history, as well as machine internal status and context (abstract; col. 26, lines 38-50). Hoffberg teaches that the invention allows dynamic user preference profile determination based on explicit or implicit desires, which assist in processing data to make decisions that conform to the user preference. The system makes a determination of a composite preference of a group of people. The system categorizes a user population into a plurality of groups based on user preferences (demographic profiles) and user behavior (col. 1, lines 17-25, 39-43; col. 26, lines 51-58; col. 27, lines 22-35; col. 28, lines 34-40; col. 34, lines 35-67; col. 35, lines 1-35). Therefore, it would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify Gerace's method of determining user behavioral profile to include Hoffberg teaching of an interface that adapts to the behavior of the user or plurality of users because many forms of media (such as watching television, listening to music) are often done by groups of people (such as families and friends), and a computer can provide assistance to group browsing by finding mutual interests among the participants, at home or in a business meeting.

Claim 2:

See claim 1. Gerace teaches a methodology for categorizing, describing, and modeling a user population into groups based on behavioral characteristics and/or user preferences (abstract; col. 2, lines 3-23, col. 4, lines 1-47; col. 11, lines 24-42; col. 14,

lines 4-24; col. 17, lines 1-17).

Claim 3:

See claim 1. Gerace teaches a method for designing a customized user interface, categorizing users into groups, describing the categorized user behaviors and user preferences, validating targeted user behaviors and preferences (col. 4, lines 12-47; col. 11, lines 46-56); capturing emergent behaviors and preferences (col. 2, lines 1-29); tracking design requirements and implementations (col. 2, lines 30-60); accommodating diversity in performance and preference during testing (col. 15, lines 25-44); and customizing a user interface design to the user(s), (cols. 7-10; col. 11, lines 24-42; col. 14, lines 4-23; col. 17, lines 1-17). Gerace teaches categorizing groups of users and determining what kind of advertisement (or programs) should be displayed to these different groups of users (col. 12, lines 23-42; col. 13, lines 1-12; col. 17, lines 1-17; col. 18, lines 10-26, 64-67; col. 19, lines 1-6; col. 20, lines 49-51, 63-67; col. 21, lines 5-11, 53-65).

Claims 4 and 12:

Gerace discloses a method for designing a customized user interface that can be incorporated into business/negotiation system (col. 1, lines 14-22, 52-65; col. 20, lines 52-67).

Claims 5 and 13:

Gerace teaches screen views of telephone directory pages (col. 16, lines 37-55) but fails to teach that the user interface can be incorporated into a telephone

system. However, Hoffberg teaches an interface system that predicts a desired action based on the user input, a past history of use, a context of use, and a set of predetermined or adaptive rules (col. 26, lines 51-62; col. 27, lines 22-35; col. 29, lines 10-18; col. 30, lines 60-67; col. 31, lines 58067). The system determines a program preference for one or more individuals, formulates a group preference (col. 34, lines 35-39, 51-67; col. 35, lines 1-35), and provides a tailored interface adapted to the characteristics of the user (col. 63, lines 15-39). Hoffberg discloses an interface that can be used to control complex telecommunications functions of advanced telephone and telecommunications equipment (col. 88, lines 65-67; col. 89, lines 1-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Gerace's method for determining behavioral profile of a user to include Hoffberg's interface incorporating adaptive pattern recognition because as Hoffberg says, this interface would provide the user with an optimized environment for human interaction by providing an intelligent and enhanced interface that adapts to the behavior or preferences of the user.

Claims 6 and 14:

Gerace discloses a user interface that can be incorporated based on an interface provided on the Internet (col. 1, lines 30-67; col. 3, lines 39-62; col. 4, lines 1-11).

Claims 7 and 15:

Gerace discloses a user interface that can be incorporated into an interactive

graphic user interface system (col. 1, lines 30-44).

Claims 9 and 17:

Gerace discloses a user interface that can be incorporated into a computer operating system (col. 12, lines 43-56).

Claims 10 and 18:

Gerace discloses an interface that can be incorporated into a television programming interface (col. 1, lines 18-22; col. 10, lines 9-22; col. 22, lines 43-52; col. 36, lines 49-58).

Claim 11:

See claims 1-3. Gerace teaches user selection and customization of content and display of information (col. 11, lines 24-56); creation of user profile (col. 2, lines 1-60); and development of a customized user interface for groups of users according to design requirements (abstract; col. 4, lines 44-47; col. 5, lines 26-34; col. 7-10; col. 12, lines 22-33; col. 13, lines 1-12; col. 14, lines 4-23; col. 16, lines 30-55; col. 17, lines 1-17; col. 18, lines 10-25; col. 20, lines 63-67; col. 21, lines 5-11), and testing the design (col. 5, lines 15-35; col. 15, lines 25-56; col. 17, lines 1-17).

6. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Gerace/Hoffberg and Vanderheiden et al (US 6,624,803 B1)*.

Gerace/Hoffberg does not teach that the interface can be incorporated into an automated teller machine. However, Vanderheiden discloses an interface for electronic

devices that permit improved access to the functions of the devices (abstract; col. 2, lines 16-23). Vanderheiden teaches a system 10 including a display 12 having a display area 14, a modem 42 that connects the computer bus 24 to a telephone line 44, to provide access to a remote computer, such as a central bank computer if the touch screen system 10 is used as a remote terminal in an automated teller machine (ATM) or the like (col. 5, lines 30-50; col. 6, lines 35-39; col. 16, lines 63-67; col. 17, lines 54-59; col. 19, lines 52-61; figs. 14 and 16). The system allows users to select information and to indicate preferences (col. 13, lines 66-67; col. 14, lines 1-5). Thus, it would have been obvious to one ordinarily skilled in the art at the time of invention to include Vanderheiden's teachings of implementing an adaptive interface in an automatic teller machine in Hoffberg's computer network method because such interface would provide the ATM's user with functions that would improve their ease of use and/or menus that would speed selection of desired services.

Conclusion

7. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach generating customized interfaces for users or groups of users based on user preferences and behavior.
8. Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to X L Bautista whose telephone number is (703) 305-3921. The examiner can normally be reached on Monday-Thursday (8:00-18:00), Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (703) 308-5186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

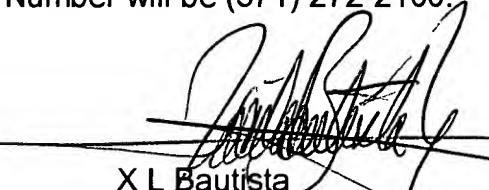
10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11. The Patent and Trademark Office will be moving to Carlyle in October 2004 (October 12th through October 28th). The Examiner's new telephone number will be (571) 272-4132; The Examiner's SPE new telephone number will be (571) 272-4136; and the Technology Center Main Telephone Number will be (571) 272-2100.



X L Bautista
Patent Examiner
Art Unit 2179

xlb
26 September 2004